

**A Report on One-day Expert Talk titled**  
**“Research and Innovation”**  
**Organised by Department of Mechanical Engineering**  
**on 22.08.2024**



**MADANAPALLE INSTITUTE OF TECHNOLOGY AND SCIENCE**  
(UGC - AUTONOMOUS INSTITUTION)  
Madanapalle-517325, Annamayya District, Andhra Pradesh

**DEPARTMENT OF MECHANICAL ENGINEERING**  
in association with IIC  
cordially Invites

An Expert talk on  
**Research and Innovation**

Resource Person  
**DR. S. BASKARAN**  
Associate Professor & Head  
Department of Mechanical Engineering  
MADANAPALLE INSTITUTE OF TECHNOLOGY AND SCIENCE

Date: 22.08.2024      Time: 11.10 AM - 12.10 PM

Chief Patron Dr. N. Vjaya Bhaskar Choudary, Ph.D., Secretary & Correspondent	Patron Mrs. Keerthi Nadella Executive Director	Chief Convenor Dr. C. Yuvaraj Principal	Convenor Dr. S. Baskaran Head, ME	Coordinator Mr. Ajith Gopal Joshi Assistant Professor, ME
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**Report Submitted by: Mr. Ajith G. Joshi, Assistant Professor & Innovation Cell Member, Department of Mechanical Engineering.**

**Resource Person Details: Dr. S. Baskaran, Assoc. Professor, Dept. of Mechanical Engineering.**

**Venue and Time: KB008 and 11:10 AM - 12:10 PM.**

**Mode of Conduct: Offline.**

**Report Received on 09.09.2024.**

**Objectives:**

- To provide insights into the latest trends in research and innovation within the field of Mechanical Engineering.
- To inspire and guide students on how to engage in meaningful research and contribute to innovation in the industry.

**Overview:**

A Talk on “**Research and Innovation**” was organized by Department of Mechanical Engineering in association with IIC of MITS at KB008, Madanapalle Institute of Technology & Science, on 22nd August 2024. **Mr. Ajith G. Joshi**, Asst. Prof. & Innovation Cell Member was the coordinator for the event.

The event provided an opportunity for students to understand the various steps involved in conducting high-quality research (i.e., problem identification, literature review, methodology, data analysis, and publication). Also highlighted the importance of staying updated with the latest research publications and participating in academic conferences. The program started at 11:10 AM in the offline mode at KB008 classroom. **Dr. S. Baskaran, Associate Professor & Head, Department of Mechanical Engineering, MITS** was the resource person. **Mr. Ajith G. Joshi**, has initiated the program through welcoming HOD of the Mech. Engg. Dept. Dr. S. Baskaran and students for the event.

**Dr. S. Baskaran** focused his talk on current trends in Mechanical Engineering Research of emerging research areas (e.g., robotics, materials science, renewable energy, additive manufacturing) and Discussed on the importance of interdisciplinary approaches in solving complex engineering problems. Also emphasized the importance of innovation in Mechanical Engineering. He given the examples of ground-breaking innovations in the field (e.g., advancements in AI-driven automation, sustainable manufacturing processes) and the role of innovation in driving industry growth and addressing global challenges.

Mr. Ajith G Joshi, has conveyed vote of thanks to management, Principal, HOD, Panel members, students and others who have helped for the successful conduction of the event. Students have appreciated the event. Also, **Dr. S. Gopalakrishnan, IIC coordinator** and other IIC members have extended their support for the conduction of the event. Department of Mechanical Engineering thanks the management for supporting to conduct the event successfully.



### Benefits of the Event:

The key benefits are

1. Exposure to Cutting-Edge Knowledge
2. Skill Development
3. Inspiration and Motivation
4. Academic and Professional Growth
5. Application of Knowledge

### Outcome of the Event:

The outcome of a research and innovation talk for ME students can be quite impactful. Here are some potential outcomes:

1. **Increased Awareness:** Students gained a deeper understanding of the importance of research and innovation in Mechanical Engineering. They learnt how these elements drive progress and solve real-world problems.
2. **Skill Development:** Students may acquire new skills or techniques related to research methodologies, critical thinking, problem-solving, and innovation processes.
3. **Exposure to Cutting-edge Trends:** Students are exposed to the latest trends, technologies, and innovations in their field. This knowledge can help them stay competitive in a rapidly evolving industry.
4. **Encouragement of Interdisciplinary Thinking:** Students may be encouraged to think beyond their specific discipline and consider how research and innovation in other fields can impact their work.

Overall, such a lecture can leave students better equipped, motivated, and connected to pursue careers in research, innovation, or any field that benefits from creative thinking and problem-solving.